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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Qingliang Liu

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24504

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EXAMINER

NGUYEN, BRIAN D

ART UNIT

PAPER NUMBER

2472

MAIL DATE

DELIVERY MODE

12/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,468	Applicant(s) LIU ET AL.	
	Examiner BRIAN D. NGUYEN	Art Unit 2472	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 8 is objected to because of the following informalities:

Claim 8, it is suggested to delete “dynamic” in line 2.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feinberg et al (2004/0001579) in view of Campanella et al (2001/0017849).

Regarding claim 1, Feinberg discloses a method for realizing dynamic adjustment of data bandwidth in transmission equipment (paragraph 0019), comprising adding, by a device (50) for realizing dynamic adjustment of data bandwidth in transmission equipment, a control channel (see signaling in paragraphs 0279, 0289, 0290, 0424) in a trunk link of the transmission equipment. Feinberg does not specifically disclose the control channel is for describing occupancy on time slots by a current service. However, Campanella discloses a time slot control channel with time slot control word performing this feature (paragraphs 0084, 0085, 0147, and 0149). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the time slot control channel as taught by Campanella in the system of Feinberg in order to control the allocation of time slots..

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Regarding claim 2, Feinberg discloses the control channel implements dynamic distribution on time slots in PCM line under control of CPU (see, for example, paragraphs 0081, 0372).

Regarding claim 3, Feinberg discloses the dynamic distribution on time slots is controlled by channel control words written in the control channel, and the control channel comprises one or more time slots (paragraphs 0279, 0289, 0290, 0424).

Regarding claim 4, Feinberg discloses the current service comprises voice service and data service (abstract).

Regarding claim 5, Feinberg discloses the method is applied in peer networking (paragraph 0241).

Regarding claim 6, Feinberg discloses a device for realizing dynamic adjustment of data bandwidth in transmission equipment, comprising: a control word process circuit, a time slot distribution circuit and a CPU interface circuit, wherein the control word process circuit is designed to complete extraction and insertion of control information in control channel of E1/T1 link; the time slot distribution circuit is designed to complete separating voice time slots from Ethernet data time slots, and rebuilding data. Feinberg does not specifically disclose controlling on time slot distribution. However, Campanella discloses a time slot control channel with controlling time slot distribution (paragraphs 0084, 0085, 0147, and 0149). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the time slot control channel as taught by Campanella in the system of Feinberg in order to control the allocation of time slots.

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Regarding claim 7, Feinberg discloses High Level Data Link Control (HDLC), Media Access Control (MAC) frame process circuit to implement processing HDLC link for Ethernet data, checking integrity of MAC frame, comparing and learning MAC addresses (paragraphs 0070, 0099, 0292).

Regarding claim 8, Feinberg discloses the time slot dynamic distribution circuit is controlled by channel control words written in a control channel, and the control channel comprises one or more time slots (paragraphs 0279, 0289, 0290, 0424).

Regarding claim 9, Feinberg discloses a method for realizing dynamic adjustment of data bandwidth in transmission equipment, comprising: releasing the time slots from data service by the time slot distribution circuit; and distributing to the voice service; informing the time slot distribution circuit by CPU of the time slot having been released by the voice service after voice call finishes; and distributing the time slots to Ethernet data service by the time slot distribution circuit, whereby dynamic adjustment of Ethernet data service is implemented (see dynamic allocation and re-allocation of bandwidth for voice and data communications in paragraphs 0019, 0081, 0279, 0289, 0290, 0424 and figures 3, 3A, 4). Feinberg does not specifically disclose informing a time slot distribution circuit by CPU of time slots to be occupied by a voice service as voice call begins. However, Campanella discloses this feature (paragraphs 0084, 0085, 0147, and 0149). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the time slot control channel as taught by Campanella in the system of Feinberg in order to control the allocation of time slots.

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Regarding claim 10, Feinberg discloses the device (50) for realizing dynamic adjustment of data bandwidth in transmission equipment comprises: a control word process circuit (a circuit that provides signaling information described in paragraphs 0289), a time slot distribution circuit (paragraph 0018) and a CPU interface circuit (704 in figure 50A), the control word process circuit is designed to complete extraction and insertion of control information in the control channel of E1/T1 link (link 740); the time slot distribution circuit is designed to complete separating voice time slots from Ethernet data time slots, and rebuilding data (paragraphs 0009 and 0011); the CPU interface circuit implements controlling on time slot distribution (paragraph 0424).

Response to Arguments

4. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN D. NGUYEN whose telephone number is (571)272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/9/09

/Brian D Nguyen/

Primary Examiner, Art Unit 2472